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[54]	BLOW MOLDING DEVICE FOR
	PRODUCING THERMOPLASTIC
	CONTAINERS

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[56] References Cited

U.S. PATENT DOCUMENTS

5,332,384	7/1994	Abramat 425/522
5,346,386	9/1994	Albrecht et al 425/541
5,358,396	10/1994	Giesen 425/192 R

FOREIGN PATENT DOCUMENTS

2057196	5/1971	France	249/102
2613979	10/1988	France.	
2646802	11/1990	France.	
2653058	4/1991	France	425/522
3613543	12/1986	Germany.	
3934495	12/1990	Germany.	

OTHER PUBLICATIONS

"Quick-change systems add to blow molders' market reach", by Patrick A. Toensmeier, Modern Plastics International, Aug. 1991 (pp. 30-31).

Patent Abstracts of Japan, vol. 12, No. 286 (M-727), Aug. 5, 1988, (Abstract of Japanese reference 63-062,710 dated Mar. 19, 1988).

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[57] **ABSTRACT**

The invention concerns a device for producing thermoplastic containers, in particular bottles, by the blow-molding or stretch blow-molding of a preheated preform. The device comprises at least one mould consisting of two half-molds (2) each supported by a mould carrier, the two mould carriers being movable relative to each other. Each halfmould (2) comprises a shell holder (9), supported by the respective mould carrier, and a shell (7) which is equipped with a half-impression (8) of the container to be obtained and can be rendered integral in a detachable manner with its shell holder (9) by rapid-fastening means (19-23). The shell (7) and the shell holder (9) are of complementary shapes such that they contact each other at least partially for heat conduction purposes whilst the pipes and connections for circulating and/or heating fluids are provided in the shell holder alone.

14 Claims, 3 Drawing Sheets

